

**COLORADO DEPARTMENT OF TRANSPORTATION  
PRE-APPROVED PRODUCT EVALUATION REQUEST & SUMMARY**

APL Reference No.

**3275-20**

Product Evaluation Coordinator  
Colorado Department of Transportation  
4670 North Holly Street, Unit A  
Denver, Colorado 80216

Material code:  
**601.09.01.00**  
Material code description full name:  
**Concrete, Patching Material**

**PART 1**

Product name: <b>Civil/Structural VO</b>	Product category: <b>Concrete/Repair/Patching/Rapid Set, Vertical &amp; Overhead</b>
Product Representative (name & address): Attn: <b>Todd Fraker</b>  <b>Dayton Superior Corp.</b> <b>3702, 23655 E. 19th Ave., Building 2, Suite 100</b> <b>Aurora, CO 80019</b> Phone: <b>(303) 289-4808</b> E-mail: <b>toddfraaker@daytonsuperior.com</b>	Manufacturer (name & address): Attn: <b>Holly Jergens</b>  <b>Dayton Superior Corp.</b> <b>636 S. 66th Terrace Ave.</b> <b>Kansas City, KS 66111</b> Phone: <b>(937) 866-0711</b> E-mail: <b>hollyjergens@daytonsuperior.com</b>
Web-site address: <b>www.daytonsuperior.com</b>	Web-site address: <b>www.daytonsuperior.com</b>

**Description of the product:** (Include specific quantifiable details from tech data sheet. Advertising generalities are not appropriate.)  
Civil Structural V/O is a fiber reinforced, silica fume enhanced, cement based mortar for structural repairs of vertical or overhead concrete substrates. The initial set time is around 60 minutes with a final set time of 5-6 hours. The product hits an average 7 day compressive strength of 9,000-10,000 psi and a 28 day compressive strength average above 12,000 psi when tested in accordance with ASTM C928 for a Type R2 mortar.

**Restrictions,** (installation and/or use):  
All surfaces to be repaired should be in a saturated-surface dry condition with no standing water. Min. application temp is 40F

**Use of the product,** (be specific to CDOT highway activities only):  
Vertical and overhead repair of columns, bridges, tunnels, parking structures, etc.

**Benefits to CDOT,** (how will your product enhance quality, improve safety, save money, be a better value then other manufacturer's products):  
Product includes a unique corrosion inhibitor that protects steel reinforcements from both chloride intrusion and carbonation. It offers excellent freeze/thaw resistance, does not require the use of forms for vertical or overhead projects, and can be used both interior and exterior. It has high bond strength and is shrinkage compensated.

- Specifications:** (listing those applicable is required)
- CDOT : 601.09
  - ASTM : C928 R2
  - AASHTO:
  - FHWA :
  - other :

Certificate of Compliance (COC) provided  Certificate of Verification (COV) provided for select categories ONLY

**Product Testing:** (National/independent laboratories or universities with Report Date.) **Certified Test Report (CTR)** provided to validate all claims.

- NTPEP-AASHTO:
- FHWA :
- other : Nelson Labs ASTM C928 Testing (January 29, 2020)
- other :
- other :

**State DOT Approvals,** (current documentation required): **WY** Expiration Date **4 Years / 03-26-2025**

Sample submitted:  yes  no  n/a Safety Data Sheets (SDS):  yes  no  n/a

Alternate Product Category:  
Additional Comments:  
Samples are available upon request for no charge to the DOT